CLAIMS

1. A computer program product, tangibly embodied in an information carrier, for developing applications, the computer program product being operable to cause data processing apparatus to interact with data conforming to a data model, the data model comprising:

   a component class;

   a model class associated with the component class, the model class including a model-class class and a model relation class, the model-class class including a model class attribute class, and the model relation class including a model relation role class;

   a controller class associated with the component class, the controller class including a context node class having a context attribute class, the context node class being associated with the model-class class and the model relation class, and the context attribute class being associated with the model class attribute class; and

   a view class associated with the component class, the view class including a user interface element class having a binding with either the context node class or the context attribute class.

2. The computer program product of claim 1, wherein the data model further comprises a context element class that is a superclass of the context node class and the context attribute class.

3. The computer program product of claim 2, wherein the binding is associated with one of the context node class and the context attribute class using the context element class.

4. The computer program product of claim 1, wherein the association between the component class and the view class is an aggregation.

5. The computer program product of claim 1, wherein the association between the component and the controller is an aggregation.

6. The computer program product of claim 1, wherein the data model further includes an indicator that is used to determine a file border.

7. The computer program product of claim 1, wherein the data model further includes an indicator used to implement a platform-specific feature.

8. The computer program product of claim 1, wherein the data model further includes an indicator representing translatable text.

9. The computer program product of claim 1, wherein at least one of the associations in the data model is an aggregation, and wherein the data model further includes an indicator representing whether the aggregation is ordered.

10. The computer program product of claim 1, wherein the data model further includes an indicator representing a singular name.

11. The computer program product of claim 1, wherein the data model further includes an indicator representing whether an attribute is nullable.

12. The computer program product of claim 1, wherein the data model further includes an unassociated class defining enumeration attributes representing allowed values of a specific enumeration type.

13. A computer program product, tangibly embodied in an information carrier, for developing applications, the computer program product being operable to cause data processing apparatus to:

generate an instance of a model, the instance of the model including a model class instance and a model relation instance, the model class instance including a model class attribute instance, and the model relation instance including a model relation role instance;

generate an instance of a controller, the instance of the controller including a context node instance having a context attribute instance;

generate an instance of a view, the instance of the view including a user interface element instance ;

associate the context node instance with the model class instance;

associate the context node instance with the model relation instance;

associate the context attribute instance with the model class attribute instance; and

associate the user interface element instance with one of the context node instance and the context attribute instance.

14. The computer program product of claim 13, wherein the association between the controller instance and the context node instance is an aggregation.

15. The computer program product of claim 13, wherein the association between the model instance and the model class instance is an aggregation.

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16. A system for developing applications, the system comprising a repository including data conforming to a data model, the data model comprising:

a component class;

a model class associated with the component class, the model class including a model-class class and a model relation class, the model-class class including a model class attribute class and the model relation class including a model relation role class;

a controller class associated with the component class, the controller class including a context node class having a context attribute class, the context node class being associated with the model-class class and the model relation class and the context attribute class being associated with the model class attribute class; and

a view class associated with the component class, the view class including a user interface element class having a binding with either the context node class and the context attribute class.

17. The system of claim 16, wherein the data model further includes an indicator that is used to determine a file border.

18. The system of claim 16, wherein the data model further includes an indicator that is used to implement a platform-specific feature.

19. The system of claim 16, wherein the data model further includes an indicator representing translatable text.

20. The system of claim 16, wherein at least one of the associations in the data model is an aggregation, and wherein the data model further includes an indicator representing whether the aggregation is ordered.

21. The system of claim 16, wherein the data model further includes an indicator representing a singular name.

22. The system of claim 16, wherein the data model further includes an indicator representing whether an attribute is nullable.